

CLAIMS

1. A hybrid power system with external auxiliary motor,
comprising:

- 5 a first power unit, having a primary shaft;
a secondary shaft, driven by said primary shaft in a
rotational movement;
a first transmission device, placed between said primary
shaft and said secondary shaft, transmitting torque from said primary
10 shaft to said secondary shaft;
an auxiliary power unit, having an electric motor with a
driving shaft, which is parallel to said primary shaft;
and a second transmission device, placed between said
primary shaft and said driving shaft, transmitting torque from said
15 electric motor to said primary shaft.

2. A hybrid power system with external auxiliary motor
according to claim 1, wherein said first transmission device further
comprises:

- 20 a primary wheel, having two wheel plates of conical shapes
at a mutual distance;
a ball, placed outside a rotational axis, controlling said
distance of said two wheel plates of said primary wheel;
a secondary wheel, having two wheel plates of conical
shapes at a mutual distance; and
25 a torque cam with a spring, controlling said distance of
said two wheel plates of said secondary wheel depending on load; and
a transmission belt, running over said primary and
secondary wheels.

3. A hybrid power system with external auxiliary motor
30 according to claim 1, wherein said first power unit is an internal
combustion engine.

4. A hybrid power system with external auxiliary motor according to claim 1, wherein said second transmission device further comprises:

5 a first wheel, mounted on said driving shaft;
a second wheel, mounted on said primary shaft; and
a second transmission belt, running over said first and second wheels, allowing said first and second wheels to drive each other.

10 5. A hybrid power system with external auxiliary motor according to claim 2, wherein said secondary wheel further comprises a clutch, having a seat, at least one gripping block and at least one spring.

15 6. A hybrid power system with external auxiliary motor according to claim 1, wherein said electric motor is connected with a rechargeable battery as an energy source to drive said secondary shaft.

7. A hybrid power system with external auxiliary motor according to claim 1, wherein said electric motor, when not operating as a motor, generates electricity to recharge a battery.

20 8. A hybrid power system with external auxiliary motor according to claim 4, wherein said second transmission belt is a regular transmission belt.

25 9. A hybrid power system with external auxiliary motor according to claim 1, wherein a signal generator is mounted on said primary shaft for generating timing signals for ignition of said first power unit.

30 10. A hybrid power system with external auxiliary motor according to claim 1, wherein said second transmission device has a chain and two gear wheels, transmitting torque from said electric motor to said primary shaft.

11. A hybrid power system with external auxiliary motor according to claim 1, wherein said second transmission device has at least two gear wheels, transmitting torque from said electric motor to said primary shaft.

12. A hybrid power system with external auxiliary motor according to claim 1, wherein said first power unit drives a rotational movement of said primary shaft via a transmission box.

13. A hybrid power system with external auxiliary motor according to claim 1, wherein a kick starter is mounted on said transmission box or said primary shaft for starting said first power unit.

14. A hybrid power system with external auxiliary motor according to claim 11, wherein a kick starter is mounted on said transmission box or said primary shaft for starting said first power unit.

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